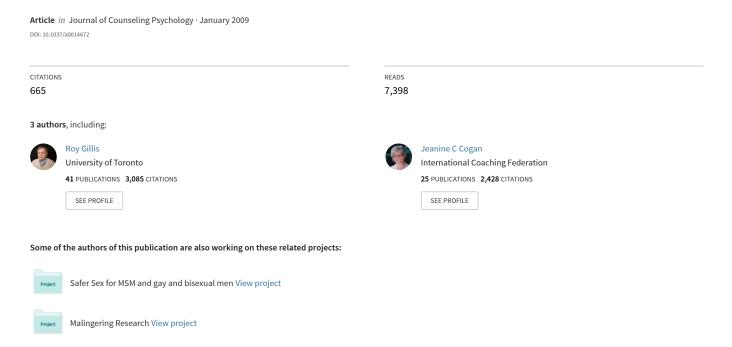
$See \ discussions, stats, and \ author \ profiles \ for \ this \ publication \ at: \ https://www.researchgate.net/publication/232603390$ 

# Internalized Stigma Among Sexual Minority Adults: Insights From a Social Psychological Perspective



## Internalized Stigma Among Sexual Minority Adults: Insights From A Social Psychological Perspective

Gregory M. Herek
University of California, Davis

J. Roy Gillis Ontario Institute for Studies in Education, University of Toronto Jeanine C. Cogan *Washington*, *DC* 

This is a preprint of a paper that has been accepted for publication in the *Journal of Counseling Psychology*. Minor changes to the paper may be made in the course of copy editing.

### Abstract<sup>1</sup>

This article describes a social psychological framework for understanding sexual stigma and it reports data on sexual minority individuals' stigma-related experiences. The framework distinguishes between stigma's manifestations in society's institutions (heterosexism) and among individuals. The latter include enacted sexual stigma (overt negative actions against sexual minorities, such as hate crimes), felt sexual stigma (expectations about the circumstances in which sexual stigma will be enacted), and internalized sexual stigma (personal acceptance of sexual stigma as part of one's value system and self-concept). Drawing from previous research on internalized sexual stigma among heterosexuals (i.e., sexual prejudice), the article considers possible parallels in how sexual minorities experience internalized sexual stigma (i.e., self-stigma, or negative attitudes toward the self). Data are presented from a community sample of lesbian, gay, and bisexual adults (N =2,259) to illustrate the model's utility for generating and testing hypotheses concerning self-stigma.

assistance.

Heterosexuals' attitudes toward sexual minorities have changed remarkably in the United States and elsewhere during the past two decades, and some of society's key institutions have reversed or tempered their historically negative stance toward lesbian, gay, and bisexual people (Herek, 2009a). Yet, even as U.S. society has become increasingly accepting of them, sexual minority individuals continue to experience considerable discrimination and hostility (e.g., Herek, 2009b; HR 2015, 2007; Rostosky, Riggle, Horne, & Miller, this issue). Consequently, understanding the nature and consequences of sexual stigma remains an important aim for researchers and practitioners.

Previous work in this area has often been framed in terms of homophobia, a word coined by Weinberg (1972) to refer to "the dread of being in close quarters with homosexuals – and in the case of homosexuals themselves, self-loathing" (p. 4). Whereas Weinberg's definition of homophobia suggested that a symmetry exists between the experiences of heterosexuals and homosexuals, subsequent work by psychologists and other behavioral scientists has tended to focus on the experiences of either heterosexuals or sexual minority people. Rarely have both been considered in tandem. Moreover, such work has often used the homophobia construct not only to refer to individual reactions to homosexuality, but also to characterize societal institutions such as the law and religion. Assigning such an expansive scope to this construct ultimately reduces its utility for

<sup>&</sup>lt;sup>1</sup> The data reported here were collected with support from a grant to Gregory Herek from the National Institute of Mental Health (R01 MH50185). We thank Stephen Franzoi and John Capitanio for their helpful comments and

researchers and practitioners (Herek, 2004).

Herek (2007, 2008, 2009a) has proposed a unified conceptual framework that attempts to move psychological discourse beyond the rubric of homophobia to a more nuanced understanding of the various phenomena that are often referenced by this construct. The framework is intended to facilitate analysis of the relationships sexual stigma's structural between individual manifestations while illuminating parallels between the stigma-related experiences of sexual minorities and heterosexuals. Similarities across sexual orientation groups are rooted in at least two kinds of common experience. First, most children internalize the tenets of sexual stigma to at least some degree during the socialization process, usually in conjunction with the expectation that they will grow up to be heterosexual. Second, because sexual orientation is usually a concealable status, anyone - regardless of their actual sexual orientation – can potentially be perceived by others as heterosexual, homosexual, or bisexual.

In the present article, we summarize the conceptual framework and then elaborate upon it by considering how constructs from research on sexual prejudice among heterosexuals might yield useful insights into self-stigma among sexual minorities. In particular, we explore how the social psychological construct of *attitudes* can be used to better understand sexual minority individuals' internalization of sexual stigma, and we present previously unpublished data from a large community-based study of sexual minority adults relevant to this goal.

### **The Conceptual Framework**

In this section, we present a brief summary of the unified conceptual framework. More detailed information about the model, its grounding in sociological theories of stigma and psychological theories of prejudice, and its applicability to existing empirical findings is available elsewhere (Herek, 2007, 2008, 2009a).

The framework starts from a cultural analysis of how sexuality is socially constructed and how social categories based on sexuality reflect power and status inequalities. The term *sexual stigma* is used to refer broadly to the negative regard, inferior status, and relative

powerlessness that society collectively accords anvone associated with nonheterosexual behaviors, identity, relationships, communities. Inherent in this definition is the recognition that sexual stigma constitutes shared knowledge: The members of society know that homosexual behaviors and attractions are devalued relative to heterosexuality and they are aware of the hostility and malevolent stereotypes that are routinely attached to gay, lesbian, and bisexual individuals.

Stigma-based differentials in status and power are legitimated and perpetuated by society's institutions and ideological systems in the form of structural or institutional stigma. Structural sexual stigma, or *heterosexism*, is an ideology embodied in institutional practices that work to the disadvantage of sexual minority groups. As a phenomenon, heterosexism is structural relatively autonomous from the prejudice of individual members of society. It operates through at least two general processes. First, everyone presumed to because is heterosexual (a tacit belief often referred to as Heterosexual Assumption"), sexual minorities generally remain invisible and unacknowledged by society's institutions. Second, when sexual minorities become visible, they are problematized, that is, they are presumed to be abnormal, unnatural, requiring explanation, and deserving of discriminatory treatment and hostility. Heterosexuals, by contrast, are considered prototypical members of the category "people." Instances of heterosexism include religious doctrines that vilify sexual minorities and laws that prohibit marriage equality or mandate the U.S. military's "Don't Ask, Don't Tell" policy (Herek, Chopp, & Strohl, 2007).

Against the backdrop of heterosexism, individuals – regardless of their sexual orientation – experience and manifest sexual stigma in at least three ways. First, sexual stigma is expressed behaviorally through actions such as shunning, ostracism, the use of antigay epithets, overt discrimination, and violence (e.g., Herek, 2009b). These and similar expressions constitute *enacted* sexual stigma. Because anyone can potentially be perceived as gay, lesbian, or bisexual, both heterosexuals and

nonheterosexuals can be targets of enacted stigma. Members of both groups can also perpetrate enacted stigma.

A second individual manifestation of sexual stigma occurs because, as noted above, such stigma constitutes shared knowledge about society's collective reaction to homosexual behaviors, same-sex relationships, and sexual minority individuals. For any member of society - heterosexual or nonheterosexual - this knowledge includes expectations about the probability that stigma enactments will occur in particular situation or under specific circumstances. Because anyone is potentially a target and because people generally wish to avoid suffering stigma enactments, such expectations often motivate them to modify their behavior (e.g., Herek, 1996). This knowledge of society's stance toward nonheterosexuals, including expectations about the likelihood of stigma being enacted in a given situation, is referred to as felt sexual stigma. Felt stigma can motivate heterosexuals and nonheterosexuals alike to use various self-presentation strategies to avoid being labeled homosexual or bisexual. It can be adaptive insofar as it enables one to avoid being the target of stigma enactments, but it also has costs. Felt stigma can motivate heterosexuals and nonheterosexuals to constrict their range of behavioral options - e.g., by avoiding gender nonconformity or physical contact with same-sex friends - and even to enact sexual stigma against others. In addition, it can lead sexual minorities to chronically conceal or deny their identity and to socially isolate themselves, strategies that often have negative psychological consequences (e.g., Pachankis, 2007).

Finally, a third manifestation is *internalized* sexual stigma — a heterosexual or sexual minority individual's personal acceptance of sexual stigma as a part of her or his own value system. Internalizing sexual stigma involves adapting one's self-concept to be congruent with the stigmatizing responses of society. For heterosexuals, internalized stigma is manifested as negative attitudes toward sexual minorities, which are referred to here as *sexual prejudice*. This phenomenon has also been labeled *homophobia*, *homonegativity*, and *heterosexism*.

For sexual minority individuals, internalized stigma can be directed both inward and outward. As mentioned above, they – like heterosexuals – typically grow up learning the tenets of sexual stigma and applying them to others. Thus, they are capable of holding negative attitudes toward other lesbians, gay men, or bisexuals. In most cases, however, such prejudice is probably secondary to negative attitudes that they harbor toward themselves and their own homosexual desires. This self-directed prejudice, which is based on the individuals' acceptance of and agreement with society's negative evaluation of homosexuality, is referred to here as *self-stigma*. has also been labeled internalized homophobia, internalized heterosexism, and internalized homonegativity. 1

# Using The Conceptual Framework To Understand Sexual Minority Experiences

By highlighting these parallels between heterosexuals and sexual minorities. conceptual framework summarized above and in Table 1 can enrich psychologists' understanding of how sexual stigma affects all members of society. Elsewhere, for example, Herek (2007) has suggested that behavioral scientists can gain insights into the reduction of sexual prejudice among heterosexuals by examining how sexual minority individuals overcome their own selfstigma. In the present article, we extend this idea by examining some ways in which theory and research on majority group prejudice against minorities might advance our understanding of how sexual minorities deal with self-stigma. Thus, we focus here on internalized sexual stigma, especially as it is manifested by sexual minority individuals.

Before proceeding, we note some important parallels between the present framework and another approach that has been widely applied to the study of internalized stigma among lesbian, gay, and bisexual people, namely, the minority stress model, or MSM (Meyer, 1995, 2003). According to the MSM, the internalization of negative societal attitudes (i.e., self-stigma) is a major source of stress for minority individuals. In addition, the MSM highlights the stress induced by external, objectively stressful events and conditions (which correspond to enacted

stigma) and the minority individual's expectation of such events and its attendant vigilance (which correspond to felt stigma). Although both models highlight these three aspects of minority experience, they do so with somewhat different aims. The MSM, as its name implies, mainly a framework understanding the unique stressors experienced by minority individuals, their consequences for health, and ameliorative processes. The present article's framework, by contrast, is intended to shed light on the societal phenomenon of sexual stigma and its individual manifestations among majority and minority members alike, including psychological phenomena of sexual prejudice among heterosexuals and self-stigma among sexual minorities. Thus, we regard the two approaches as complementary rather than competing.

Central to the present discussion is the social psychological construct of *attitudes*. An attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor (Eagly & Chaiken, 1993). *Prejudice* represents a specific type of attitude, one involving evaluations (typically negative) of the members of a particular social category or group.

Conceptualizing self-stigma as an attitude suggests several promising parallels with sexual prejudice, three of which are explored here. First, like heterosexuals' prejudice against sexual minorities, the negative self-attitudes of nonheterosexuals are formed and maintained within the context of a culture whose institutions and reinforce those foster attitudes: consequently, an individual's location within those institutions should help to predict her or his level of sexual self-stigma. Second, like other attitudes, self-stigma can be understood as correlated with and deriving from multiple beliefs, affects, and behaviors. Thus, sexual minority individuals' levels of self-stigma should be predicted by their beliefs, affects, and behaviors related to their sexual orientation and the sexual minority population. Third, as a negative attitude toward the self, sexual selfstigma can usefully be considered a domainspecific form of low self-esteem. Consequently,

the relationship between self-stigma and psychological distress and well-being should be mediated by global self-esteem. In the sections that follow, we elaborate upon each of these ideas and present illustrative data from a study we conducted with a large community-based sample.

#### Data Source

Baseline data were collected from a sample of 2,259 lesbian, gay, and bisexual adults (1,170 women, 1,089 men) who were recruited through multiple venues in the greater Sacramento (CA) area to complete an extensive self-administered questionnaire battery. Detailed information about the sample and data collection procedures has been presented elsewhere (Herek, Gillis, & Cogan, 1999; Herek, Cogan, & Gillis, 2002). At the time of initial data collection, 2,017 (89%) respondents indicated their willingness to participate in follow-up research and provided contact information. Approximately one year later, we were able to recontact and obtain additional data from 1,321 (65%) of them.

The analyses reported below focus on the variable of self-stigma, which was assessed with the Revised Internalized Homophobia Scale, or IHP-R. This self-report measure is a short version of the IHP, whose items were derived by the late John Martin from the DSM-III-R criteria diagnostic for ego-dystonic homosexuality (American **Psychiatric** Association, 1980) and which focus on respondents' attitudes toward their own sexual orientation (Herek, Cogan, Gillis, & Glunt. 1998; Meyer, 1995; see also Hamilton & Mahalik, this issue). Thus, the IHP-R – like the longer IHP - is somewhat analogous to the social distance scales used by social psychologists to measure majority group members' willingness to associate with minority group members.

Although the original IHP scale has been found to have acceptable internal consistency and construct validity (Herek et al., 1998; Herek & Glunt, 1995), it was originally developed for administration to gay men. Through a series of factor- and item-analyses, we developed a 5-item version of the IHP that is better suited to administration to bisexuals and lesbians as well.

The female version of the IHP-R scale consists of the following items (alternate wording for male respondents is indicated in bracketed text): (1) I wish I weren't lesbian/bisexual [gay/bisexual]. (2) I have tried to stop being attracted to women [men] in general. (3) If someone offered me the chance to be completely heterosexual, I would accept the chance. (4) I feel that being lesbian/bisexual [gay/bisexual] is a personal shortcoming for me. (5) I would like to get professional help in order to change my sexual orientation from lesbian/bisexual [gay/bisexual] to straight.

The items were administered with a 5-point response scale, ranging from *disagree strongly* to *agree strongly*. Scale scores were computed by summing responses and dividing by the total number of items, thereby maintaining the 1-5 response scale metric for ease of interpretation. Higher scores indicate more negative self-attitudes. For the present sample, internal reliability for the 5-item IHP-R scale was  $\alpha = .82$  (vs.  $\alpha = .85$  for the original 9-item IHP). Scores on the IHP-R were highly correlated with the full IHP for all sexual orientation groups (all rs > .90). IHP-R scores on the baseline and follow-up surveys were highly correlated (r = .67).

Most members of the present sample scored at the extreme low end of the IHP-R response range. The vast majority of lesbian (89%), gay male (77.5%), and bisexual female respondents (78%) did not agree with any of the items, indicating that they held positive attitudes toward and a strong commitment to their sexual orientation identity. An additional 7% of lesbians, 12.5% of gay men, and 12% of bisexual women agreed with only one IHP-R item. Bisexual men were the most likely to report negative attitudes toward their sexual orientation: 23.5% agreed with two or more IHP-R items, whereas only 54.5% did not agree with any items. Because the skewed distribution and constricted range of scores on the IHP-R measure could obscure relationships among the variables of interest, the statistical analyses reported below were conducted with a natural log transformation of the summary IHP-R scores. However, the more easily interpreted raw scale scores are reported in the tables.

Baseline IHP-R scores were significantly (all ps < .05) correlated with age and educational level (higher scores were associated with being younger and having less formal education) and systematically bv race differed respondents scored significantly higher than others). These same variables also differed across gender and sexual orientation groups in the sample. Bisexuals were significantly younger than gay men and lesbians, and bisexual men reported significantly less formal education than other respondents. In addition, bisexuals were significantly more likely than gay men and lesbians to be African American. Consequently, the analyses presented below controlled for respondents' race, education, and age when appropriate.

### The Cultural Context of Sexual Self-Stigma

Using data from the sample, we evaluated whether hypotheses based on the three previously discussed parallels between selfstigma and sexual prejudice have empirical support. The first proposition to be considered is that sexual minorities' negative attitudes toward themselves should be understood within the context of a culture whose institutions foster and reinforce those attitudes. Sexual self-stigma, like sexual prejudice among heterosexuals, is an endorsement of a cultural ideology that disempowers sexual minorities, institutional barriers to their full participation in society, and fosters enactments of stigma against them (Herek, 2008). Currently, some institutions and ideologies in U.S. society (e.g., heterosexual masculinity, traditional Christianity, political conservatism) are characterized by especially high levels of heterosexism (e.g., Herek, 1986; Herek et al., 2007) and survey research has revealed higher levels of sexual prejudice among heterosexuals who are closely associated with those ideologies (i.e., men, the strongly religious, political conservatives) than among those who are not (women, the nonreligious, political moderates and liberals; e.g., Herek, 2009a). In a similar way, sexual minority individuals should tend to manifest higher levels of self-stigma to the extent that they are affiliated with these institutions.

With baseline IHP-R scores as the dependent

variable, a series of ANOVAs revealed that higher levels of self-stigma were indeed apparent among males, the highly religious, and the politically conservative.<sup>2</sup> As shown in the first row of Table 2, IHP-R scores were significantly higher for gay men than for lesbians, and for bisexual men than for bisexual women,  $F(1, 2154) = 138.54 (p < .001), \eta^2 =$ .06. As shown in the first two rows of Table 3, Republicans scored significantly higher than non-Republicans (F(2, 2095) = 10.66, p < .001,  $\eta^2$  = .01) and self-described political conservatives scored significantly higher than moderates who, in turn, scored significantly higher than liberals (F(2, 2093) = 19.09, p < 19.09.001,  $\eta^2 = .018$ ). Table 3 also shows that respondents scored significantly higher on the IHP-R if they belonged to a religious denomination or reported belief in a deity (F(3,2091) = 8.96, p < .001,  $\eta^2 = .013$ ) or if they attended religious services (F(2, 2113) = 5.54, p $< .01, n^2 = .005)^3$ 

### Psychological Correlates and Sources of Sexual Self-Stigmatizing Attitudes

definitions of "internalized Operational homophobia" and related constructs have reflected differing assumptions about exactly which phenomena should be considered direct manifestations of sexual self-stigma and which should be regarded as its antecedents, correlates, or consequences (e.g., Frost & Meyer, this issue; Shidlo, 1994). A social psychological approach can contribute to this ongoing discussion insofar as it suggests a fairly narrow conceptualization of self-stigma in terms of evaluations of the self, that is, self-attitudes. Whereas attitudes are correlated with - and can be inferred from relevant cognitive, affective, and behavioral information, they are nevertheless distinguishable from such information (e.g., Albarracin, Zanna, Johnson, & Kumkale, 2005). As attitudes, therefore, sexual prejudice and selfstigma alike can be understood as related to, but distinct from, an individual's current beliefs about her or his sexuality, affective stance toward belonging to a sexual orientation group, and past actions relevant to her or his sexual orientation.

Using the baseline data, we examined the

associations between self-stigma and variables in each of these three categories. As elaborated below, these included (a) beliefs about positive and negative outcomes resulting from one's sexual orientation, and essentialist beliefs about the origins of one's orientation (i.e., chosen or not chosen); (b) affect toward one's community membership; and (c) behaviors related to "outness," or openness about one's sexual orientation with parents and with nonfamily members. We employed two types of statistical analyses. For variables that were measured with continuous scales (beliefs about positive and negative outcomes, affect toward community membership, outness to nonfamily members), we used ordinary least squares regression. In control variables (sexual each equation, orientation, gender, race, education, and age) were entered on the first step, followed on a subsequent step by the independent variable of interest (e.g., outness). In evaluating these analyses, we focused on (a) the amount of additional variance in self-stigma explained by the belief, affect, and behavior variables, beyond that explained by the control variables, and (b) the relative predictive strength of the belief, affect, and behavior variables when all variables (including controls) were included in the equation. For variables that were measured categorically (essentialist beliefs, outness to parents), we used analysis of covariance. These analyses included the dichotomized independent variables of sexual orientation (1 = gay/lesbian,0 = bisexual) and gender (1 = female, 0 = male) as main effects, with race, education, and age entered as covariates. In the sections below, we report separate analyses with the variables in each of the three categories, followed by a combined analysis in which all of the belief, affect, and behavior variables were examined simultaneously.

# Self-Stigma and Beliefs About Sexual Orientation

We examined two general kinds of beliefs addressed in previous research on the cognitive sources and correlates of sexual prejudice (Herek, 2008). First, some attitude theories note the importance of beliefs about whether an attitude object is a source of benefits or punishments, with the former beliefs associated

with more positive attitudes toward the object and the latter linked to more negative attitudes (e.g., Eagly & Chaiken, 1993). Thus, just as heterosexuals' levels of sexual prejudice are likely to reflect the extent to which they perceive sexual minorities as a source of negative versus positive outcomes for themselves (Herek, 1987), so are gay, lesbian, and bisexual individuals likely to harbor higher levels of self-stigma to the extent that they associate their own minority status with more costs and fewer benefits.

We used two 4-item scales to assess beliefs about the costs and benefits associated with one's sexual orientation. One scale assessed respondents' beliefs that their negative life events and personal setbacks are attributable to sexual prejudice (Herek & Glunt, 1995; e.g., "Most of the bad things in my life happen because of homophobia";  $\alpha = .84$ ). The other scale measured respondents' beliefs that their successes and positive life events result from their membership in a sexual minority community (e.g., "I credit many of my successes in life to my contacts with the gay/bisexual community",  $\alpha = .75$ ). The mean scale scores for each gender and sexual orientation group are reported in rows 2 and 3 of Table 2. Illustrating the link between self-stigma and beliefs, regression analyses (Table 4, section 1) revealed that IHP-R scores were significantly predicted by perceptions of both costs and benefits associated with one's sexual orientation. Moreover, the belief variables accounted for a significant portion of the variance in self-stigma. beyond that explained by the control variables.

Essentialist beliefs are a second category of beliefs correlated with sexual prejudice. For example, the belief that sexual orientation is involuntary and immutable is generally associated with lower levels of prejudice among heterosexuals, at least in the United States (e.g., Haider-Markel & Joslyn, 2008). However, the data currently available for heterosexuals do not indicate whether such beliefs are causally related to sexual prejudice, or the direction of that relationship, if it exists (Herek, 2008). In parallel fashion, it is possible that sexual minority adults manifest more self-stigma to the extent that they perceive that they chose their sexual orientation, but it is also possible that perceiving choice

about one's own homosexual or bisexual orientation is unrelated to self-stigma or is even associated with rejection of it. To our knowledge, these possibilities have not been examined empirically in a sexual minority sample.

We measured essentialist beliefs with a single question, "How much choice do you feel that you had about being [lesbian/gay] /bisexual?" Bisexuals perceived they had more choice about their sexual orientation than did homosexuals, and women perceived more choice than men (Table 5, section 1). However, most gay men, lesbians, and bisexual men believed they had "no choice at all" or "very little choice," and 45% of bisexual women endorsed one of these response options (another 20% said they had only "some choice").

For IHP-R scores, with the background covariates included and with essentialist beliefs dichotomized (very little or no choice versus some choice, a fair amount, or a great deal of choice), the main effect for perceptions of choice was not significant.<sup>4</sup> However, a significant Sexual Orientation X Beliefs interaction was observed:  $\underline{F}$  (1, 2113) = 5.02, p <.05,  $n^2 = .002$ . In follow-up ANOVAs conducted separately with each sexual orientation group, IHP-R scores did not differ significantly among bisexual respondents according to beliefs about choice. However, they differed significantly among gay and lesbian respondents (F(1, 1800)) = 6.40, p = .01,  $\eta^2 = .004$ ), with those who believed they had some degree of choice scoring lower (M = 1.3, SD = 0.54) than those who believed they had little or no choice (M = 1.4). SD = 0.68). Thus, essentialist beliefs were indeed linked with self-stigma, but in a direction that is opposite to the pattern commonly observed among heterosexuals in the United States. Believing that one's homosexuality is a choice was associated with less self-stigma than believing one had little or no choice about being gay or lesbian. We speculate that, for at least some gay men and lesbians, believing their homosexuality is chosen may represent an affirmative and self-empowering embrace of their sexual orientation that is incompatible with self-stigma (Whisman, 1996). Insofar as the link between essentialist beliefs and self-stigma was

fairly weak, and the present sample included relatively few respondents who perceived their sexual orientation as a choice or manifested a high level of self-stigma, we offer this interpretation mainly as a hypothesis that warrants testing in future empirical research.

### Self-Stigma and Affect

Turning to the affective correlates of attitudes, heterosexuals' prejudice has often been conceptualized in terms of negative emotional reactions to sexual minorities (Herek, 2008). Indeed, Weinberg's (1972) use of the term homophobia to describe those reactions suggests they are grounded in intense, irrational fears (Herek, 2004). In a parallel fashion, self-stigma among sexual minority individuals is likely to be correlated with negative affect toward their own status as members of the sexual minority population. Thus, we examined the associations between affect and self-stigma using two items adapted by Herek and Glunt (1995) from the Collective Self-Esteem scale (Luhtanen & Crocker, 1992) to assess respondents' affective reactions to their membership in the sexual minority community ("I'm glad I belong to the [lesbian/gay] /bisexual community" and "I feel good about belonging to the [lesbian/gay] /bisexual community"). The items were administered with a 5-point response scale, ranging from disagree strongly to agree strongly  $(\alpha = .82).$ 

Means scores are reported in Table 2 (row 4). As shown in Table 4 (section 2), affect scores explained a significant increment of the variance in self-stigma beyond that accounted for by the control variables. Respondents experienced significantly more negative self-attitudes to the extent that they reported less positive affect about belonging to the lesbian, gay, and bisexual community.

# Self-Stigma and Behavior: Disclosure of Sexual Orientation

As noted above, a high degree of felt stigma motivates some individuals to hide their sexual minority identity and attempt to pass as heterosexual. Whereas attempting to pass in specific situations that carry a high risk for enacted stigma is adaptive, chronically concealing one's sexual orientation is likely to

be associated with higher levels of self-stigma. To test the hypothesis that sexual minority individuals manifest more self-stigma to the extent that they conceal their sexual orientation from family members and friends, we examined the associations between IHP-R scores and outness. We asked respondents whether their mother or father knew about their sexual orientation and, if so, whether or not the respondent had directly discussed it with either parent.

We also assessed respondents' levels of outness to five categories of non-family members: current heterosexual friends, heterosexual casual acquaintances, and, if applicable, coworkers, work supervisors, and school peers. Respondents described the extent to which their sexual orientation was known to the members of each category, using a 10-point scale ranging from out to none of them to out to all of them. Responses were summed and divided by the number of applicable items to yield a mean score for outness to non-family members ( $\alpha = .92$ ).

Most of the homosexual respondents reported that their sexual orientation was known by one or both parents. Nearly two thirds of lesbians (64%) and gay men (63%) were out to both parents; only 12% of lesbians and 14.5% of gay men were not out to either parent. Bisexuals were less likely to be out to their parents. A substantial minority of bisexual women (35%) and men (42%) were not out to either parent, whereas 39% of bisexual women and 32% of bisexual men were out to both parents. Respondents were generally more likely to be out to their mother than to their father, and gay and lesbian respondents were more likely than bisexual respondents to have openly discussed their sexual orientation with a parent (Table 5, sections 2 and 3).

Compared to respondents who were not out, IHP-R scores were significantly lower among those whose sexual orientation was known to their mother (F (1, 2135) = 9.75, p < .01,  $\eta^2$  = .005) or father (F (1, 2107) = 9.33, p < .01,  $\eta^2$  = .004). This relationship did not differ according to respondent sex or sexual orientation, as indicated by a lack of significant interaction

effects. Among respondents whose parent knew about their sexual orientation, IHP-R scores were significantly lower among those who had directly discussed it with the parent compared to those whose parent knew but had not been told directly by the respondent: main effect for mothers, F(1, 1697) = 17.94, p < .001,  $\eta^2 = .01$ ; for fathers, F(1, 1316) = 18.70, p < .001,  $\eta^2 =$ .014. These main effects were qualified by significant interactions between each parent's source of knowledge (told directly vs. not) and the respondent's sexual orientation: for mothers, F (1, 1697) = 4.32, p < .05,  $\eta^2$  = .003; for fathers, F (1, 1316) = 10.31, p < .01,  $\eta^2$  = .008. Follow-up analyses of covariance conducted separately for bisexual and homosexual respondents revealed that, for outness to mothers, the effect was stronger among bisexuals ( $F(1, 204) = 7.22, p < .01, \eta^2 = .034$ ) than among gay and lesbian respondents (F (1, 1490) = 8.08, p < .01,  $\eta^2 = .005$ ). For outness to fathers, the difference was significant for bisexuals  $(F(1, 128) = 10.32, p < .01, \eta^2 = .075)$ but not for gay or lesbian respondents.

Similarly, IHP-R scores were significantly associated with outness to nonfamily members (mean scores are reported in Table 2, row 5). In multiple regression analysis, the outness variables explained a significant amount of the variance in self-stigma beyond that accounted for by the control variables, and the bulk of this variance was accounted for by the measure of outness to nonfamily members (Table 4, section 3).

# Beliefs, Affect, and Behavior: Joint Effects on Self-Stigma

When all of the previously described belief, affect, and behavior variables were simultaneously entered in a regression equation, they explained 22.5% of the variance in IHP-R scores beyond that explained by the control variables (Table 4, section 4). Beliefs about costs and benefits, affect toward community membership, and outness to nonfamily all contributed significantly. Sexual minority individuals manifested less self-stigma to the extent that they believed their sexual orientation was associated with fewer costs and more benefits, had positive feelings toward their

membership in the sexual minority community, and were open about their sexual orientation with nonfamily members. Thus, sexual orientation-related beliefs, affect, and behavior are all associated with sexual self-stigma. However, the fact that they explained only a portion of the variance in IHP-R scores is consistent with the conclusion that self-stigma is distinct from these variables.

### Sexual Self-Stigma As Domain-Specific Self-Esteem

Self-stigma among sexual minorities has been observed to correlate reliably with psychological distress (Herek & Garnets, 2007; Szymanski & Gupta, this issue). A social psychological perspective suggests that this association may result in large part from the impact of selfstigma on a sexual minority individual's global self-esteem. The definition of self-stigma as a negative attitude toward oneself as a member of a stigmatized group corresponds to one of the most common social psychological definitions of self-esteem, namely, a person's evaluation of or attitude toward herself or himself (e.g., Rosenberg, Schooler, Schoenbach, Rosenberg, 1995). Social psychologists often distinguish global, or trait, self-esteem from domain-specific self-esteem, while recognizing that self-esteem in specific domains (e.g., one's sexual orientation identity) can affect global self-esteem. Global self-esteem, in turn, is correlated with many facets of psychological well-being (e.g., Rosenberg et al., 1995). Viewing self-stigma as a domain-specific form of self-esteem suggests that the associations between sexual self-stigma and psychological distress and well-being might be mediated by global self-esteem: Sexual self-stigma may reduce trait self-esteem which, in turn, may produce symptoms of anxiety and depression, as well as reduced positive affect (see also Szymanski & Gupta, this issue).

To evaluate this hypothesis, we first examined the relationships between IHP-R scores and baseline scores for (a) global self-esteem (assessed with a 6-item version of the Rosenberg Self-Esteem Scale; Rosenberg, 1965;  $\alpha = .85$ ), (b) depressive symptoms (assessed with the 20-item Center for Epidemiologic Studies

Depression scale, or CES-D; Radloff, 1977;  $\alpha = .91$ ), (c) state anxiety (assessed with 6 items from the short version of Spielberger's scale; Marteau & Bekker, 1992;  $\alpha = .92$ ), and (d) positive affect (assessed with 5 items adapted from the Affect Balance Scale; Bradburn, 1969;  $\alpha = .79$ ). Each scale was framed in terms of respondents' experiences during the previous 30 days and each provided 5 response alternatives (never, almost never, sometimes, fairly often, very often). Mean scores for each measure are reported in Table 2 (rows 6-9).

We conducted OLS regression analyses for each psychological variable. As in previous regression analyses, control variables were entered on the first step. Because our previous research with this sample revealed significantly higher levels of psychological distress among gay male and lesbian respondents who had been the target of an antigay hate crime against their person in the previous 5 years (Herek et al., 1999), a dichotomous variable for such victimization was entered in addition to the previously described control variables. IHP-R scores were entered on the next step.

In each equation, IHP-R scores contributed significantly to the explained variance in the outcome measure after controlling for the demographic and victimization variables. When entered on the second step, IHP-R scores explained significant increments of the variance in global self-esteem, depressive symptoms, state anxiety, and positive affect. Thus, IHP-R scores contributed significantly to psychological distress and well-being as measured by all four outcome variables (see Table 6).

Next, we assessed whether global self-esteem mediated the relationship between self-stigma and depressive symptoms, anxiety, and positive affect. Using an SPSS macro written for this purpose (Preacher & Hayes, 2008), we assessed the direct and indirect effects of IHP-R scores on each psychological outcome variable, once again controlling for the demographic victimization variables. As shown in Table 7, the 95% confidence intervals for the a X b paths do not include zero, indicating that all indirect effects were statistically significant. Although are consistent these results with

interpretation that the relationship between self-stigma and psychological well-being is mediated by global self-esteem, further regression analyses revealed similar patterns and magnitudes of effects when global self-esteem was entered as the outcome variable, with depression, anxiety, and positive affect as mediators. Thus, the relationship between global self-esteem and the other psychological outcomes appears to have been reciprocal in the baseline data (Rosenberg et al., 1995).

However, analysis of the follow-up data indicated that the relationships between baseline self-stigma and psychological distress and wellbeing approximately 1 year later were mediated by baseline self-esteem. For these analyses, we treated baseline self-stigma as the independent variable, baseline self-esteem as the mediator, and the follow-up measure of well-being (depressive symptoms, anxiety, positive affect) as dependent variables. We also included the baseline measure of the psychological wellbeing variable as a control, along with a dichotomous variable indicating whether or not the respondent reported having been the target of a violent antigay crime since completing the baseline questionnaire.<sup>6</sup> As shown in Table 8, the results are consistent with the mediation hypothesis for all three variables, as indicated by the fact that the 95% confidence intervals for the a X b paths do not include zero.

Thus, in the present sample, the associations between sexual self-stigma and psychological distress and well-being were mediated by global self-esteem. Higher levels of self-stigma led to reduced self-esteem, which in turn was associated with heightened psychological distress and less positive affect.

#### **Conclusion**

We have described a unified model for understanding sexual stigma and its individual manifestations from a social psychological perspective. We have attempted to demonstrate how this model offers a new vocabulary and, by highlighting parallels between the experiences of heterosexuals and sexual minority individuals, suggests new ideas for better understanding the institutional sources of sexual self-stigma; its cognitive, affective, and behavioral correlates;

and its effects on psychological well-being.

In addition to illustrating insights from the conceptual framework, the analyses presented here revealed notable differences among sexual orientation and gender groups on self-stigma and its affective, belief, and behavioral correlates. The finding that self-described bisexual men manifested more self-stigma than any other group points to the need for more study of internalized sexual stigma within this group. This is further highlighted by the differences observed between bisexuals (especially males) and homosexuals in their affective response to their membership in a sexual minority community, their perception of costs and benefits associated with their sexual orientation, and their openness about their sexual orientation. Although a detailed discussion of these differences is beyond the scope of the present article, we note that they are consistent with the findings of other research (e.g., Balsam & Mohr. 2007) and they point to the importance of distinguishing between bisexuals and homosexuals, as well as men and women, in research on the experiences of sexual minority individuals.

As we noted at the outset of this article, the idea that self-stigma in sexual minorities is an attitude whose development parallels that of sexual prejudice in heterosexuals is hardly new. In 1972, Weinberg observed "The person who from early life has loathed himself for homosexual urges arrives at this attitude by a process exactly like the one occurring in heterosexuals who hold the prejudice against homosexuals" (Weinberg, 1972, p. 74). Despite Weinberg's early insight in this regard, researchers and theorists have not fully utilized these parallels for understanding self-stigma. We hope the conceptual framework and empirical data presented here will encourage further exploration of how sexual stigma affects both heterosexuals and sexual minorities, often in parallel ways.

#### Notes

- <sup>1</sup> Sexual minority individuals can also harbor negative attitudes toward heterosexuals which can correctly be characterized as sexual prejudice. Unlike prejudice directed at sexual minorities, however, these attitudes are not reinforced by power differentials in the larger society. Thus, whereas all negative attitudes toward members of a sexual orientation group may be similar in strictly psychological terms, they differ according to whether or not they are reinforced by the social structure. For elaboration of this point, see Herek (2007).
- <sup>2</sup> The total number of cases differs across analyses because of missing data for some variables.
- <sup>3</sup> Some analyses reported here yielded relatively small effect sizes, which may indicate that the relationships among self-stigma and other variables are relatively weak albeit statistically significant. Further research may reveal important moderators of these associations. Some of the smaller effect sizes may also be due, in part, to the highly skewed distributions of IHP-R scores and some of the independent variables (e.g., religious attendance, essentialist beliefs, outness to parents).
- <sup>4</sup> A complete report of all ANCOVA results, including nonsignificant effects, is provided in the supplemental appendix.
- <sup>5</sup> To maintain consistency throughout the questionnaire, CES-D items were administered with this 5-point response scale, rather than the 4-point scale on which scale norms are based.
- <sup>6</sup> Compared to respondents who were lost to attrition, those in the follow-up sample scored significantly lower on self-stigma, anxiety, and depression, and higher on self-esteem.

#### References

- Albarracin, D., Zanna, M. P., Johnson, B. T., & Kumkale, G. T. (2005). Attitudes: Introduction and scope. In D. Albarracin, B.T. Johnson, & M.P. Zanna (Eds), *The handbook of attitudes* (pp. 3-19). Mahwah, N.J.: Lawrence Erlbaum Associates.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.
- HR 2015, The Employment Non-Discrimination Act of 2007: Hearings before the Committee on Education and Labor, Subcommittee on Health, Employment, Labor, and Pensions. 110th Cong. (2007) (testimony of M. V. Lee Badgett). Retrieved September 10, 2007, from http://www.law.ucla.edu/williamsinstitute/publication s/HR2015 testimony.pdf
- Balsam, K. F., & Mohr, J. J. (2007). Adaptation to sexual orientation stigma: A comparison of bisexual and lesbian/gay adults. *Journal of Counseling Psychology*, *54*, 306-319.
- Bradburn, N. M. (1969). *The structure of psychological well-being*. Chicago: Aldine.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Ft Worth, TX: Harcourt Brace Jovanovich.
- Haider-Markel, D. P., & Joslyn, M. R. (2008). Beliefs about the origins of homosexuality and support for gay rights: An empirical test of attribution theory. *Public Opinion Quarterly*, 72, 291-310.
- Herek, G. M. (1986). On heterosexual masculinity: Some psychical consequences of the social construction of gender and sexuality. *American Behavioral Scientist*, 29, 563-577.
- Herek, G. M. (1987). Can functions be measured? A new perspective on the functional approach to attitudes. *Social Psychology Quarterly*, *50*, 285-303.
- Herek, G. M. (1996). Why tell if you're not asked? Self-disclosure, intergroup contact, and heterosexuals' attitudes toward lesbians and gay men. In G.M. Herek, J. Jobe, & R. Carney (Eds.), *Out in force: Sexual orientation and the military* (pp. 197-225). Chicago: University of Chicago Press.
- Herek, G. M. (2004). Beyond "homophobia": Thinking about sexual stigma and prejudice in the twenty-first century. *Sexuality Research and Social Policy*, *I*(2), 6-24.
- Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues*, 63, 905-925.
- Herek, G. M. (2008). Sexual prejudice. In T. Nelson (Ed.), *Handbook of prejudice*. Mahwah, N.J.: Lawrence Erlbaum Associates.

- Herek, G. M. (2009a). Understanding sexual stigma and sexual prejudice in the United States: A conceptual framework. In D. Hope (Ed.), Contemporary perspectives on lesbian, gay and bisexual identities: The 54th Nebraska Symposium on Motivation (pp. 65-111). New York: Springer.
- Herek, G. M. (2009b). Hate crimes and stigmarelated experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal of Interpersonal Violence*, in press. [doi:10.1177/0886260508316477]
- Herek, G. M., Chopp, R., & Strohl, D. (2007). Sexual stigma: Putting sexual minority health issues in context. In I. Meyer & M. Northridge (Eds.), *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual, and transgender populations* (pp. 171-208). New York: Springer.
- Herek, G. M., Cogan, J. C., & Gillis, J. R. (2002). Victim experiences in hate crimes based on sexual orientation. *Journal of Social Issues*, *58*, 319-339.
- Herek, G. M., Cogan, J. C., Gillis, J. R., & Glunt, E. K. (1998). Correlates of internalized homophobia in a community sample of lesbians and gay men. *Journal of the Gay and Lesbian Medical Association*, 2, 17-25.
- Herek, G. M., & Garnets, L. D. (2007). Sexual orientation and mental health. *Annual Review of Clinical Psychology*, *3*, 353-375.
- Herek, G. M., Gillis, J. R., & Cogan, J. C. (1999). Psychological sequelae of hate-crime victimization among lesbian, gay, and bisexual adults. *Journal of Consulting and Clinical Psychology*, *67*, 945-951.
- Herek, G. M., & Glunt, E. K. (1995). Identity and community among gay and bisexual men in the AIDS era: Preliminary findings from the Sacramento Men's Health Study. In G.M. Herek & B. Greene (Eds.), AIDS, identity, and community: The HIV epidemic and lesbians and gay men (pp. 55-84). Thousand Oaks, CA: Sage.
- Luhtanen, R. K., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302-318.
- Marteau, T. M., & Bekker, H. (1992). The development of a six-item short-form of the state scale of the Spielberger State-Trait Anxiety Inventory (STAI). *British Journal of Clinical Psychology*, *31*, 301, 306
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36, 38-56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual

populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*, 674-697.

Pachankis, J. E. (2007). The psychological implications of concealing a stigma: A cognitive-affective-behavioral model. *Psychological Bulletin*, 133, 328-345.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385-401.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, *60*, 141-156.

Shidlo, A. (1994). Internalized homophobia: Conceptual and empirical issues in measurement. In B. Greene & G.M. Herek (Eds.), *Lesbian and gay psychology: Theory, research, and clinical applications* (pp. 176-205). Thousand Oaks, CA: Sage.

Weinberg, G. (1972). Society and the healthy homosexual. New York: St. Martin's.

Whisman, V. (1996). Queer by choice: Lesbians, gay men, and the politics of identity. New York: Routledge.

Table 1

A Framework For Conceptualizing Sexual Stigma

| Level of Analysis | Cultural  |  | Indiv   | vidual   |  |
|-------------------|---|--|---|--|--|
| Manifestation     | Heterosexism  | Enacted Stigma   | Felt Stigma   | Internalize  | ed Stigma  |
| Definition        | Structural sexual stigma; a cultural ideology embodied in institutional practices that work to the disadvantage of sexual minority groups even in the absence of individual prejudice or discrimination.  | The overt behavioral expression of sexual stigma by individuals.   | An individual's knowledge of society's stance toward nonheterosexuals, including expectations about the likelihood of stigma being enacted in a given situation.  | An individual's personal stigma as a part of her or and self-concept.                              |  |
| Examples          | <ul> <li>Sodomy laws</li> <li>"Defense of Marriage" laws</li> <li>"Don't Ask, Don't Tell"</li> <li>Lack of legal constraints on discrimination</li> <li>Religious teachings that categorically condemn same-sex relationships</li> <li>Consistently negative media portrayals of sexual minorities</li> <li>Pathologization of homosexuality</li> </ul> | <ul> <li>Shunning and ostracism of (perceived) sexual minorities</li> <li>Use of antigay terms and epithets</li> <li>Employment and housing discrimination</li> <li>Hate crimes</li> </ul> | <ul> <li>Avoidance of gender nonconformity</li> <li>Avoidance of same-sex physical contact</li> <li>Public declarations that one is heterosexual to avoid stigma</li> <li>Enactments of sexual stigma to avoid being labeled nonheterosexual</li> <li>Hiding one's homosexual or bisexual identity</li> </ul> | In Heterosexuals: Negative attitudes toward homosexuality and sexual minorities (sexual prejudice) | In Sexual Minorities:  Negative Attitudes toward oneself as homosexual or bisexual (self- stigma) Negative attitudes toward homosexuality & sexual minorities (sexual prejudice) |

Table 2
Scores on Continuous Variables By Respondent Gender and Sexual Orientation

Group Gay Men Lesbians Bisexual Bisexual Entire Variable Men Women Sample Self-Stigma (IHP-R)  $1.54_{a}$  $1.25_{\rm b}$  $2.17_{\rm c}$  $1.53_{a}$ 1.46 (0.49)(0.99)(0.73)(0.77)(0.77)Beliefs: Benefits  $2.06_{a}$  $1.88_{\rm b}$ 2.06  $2.12_{a}$  $2.00_{ab}$ (0.55)(0.58)(0.57)(0.55)(0.57)Beliefs: Costs  $1.54_{ac}$ 1.47  $1.56_{\rm a}$  $1.43_{bc}$  $1.37_{\rm b}$ (0.57)(0.51)(0.57)(0.49)(0.54)Positive Affect Toward  $3.37_{b}$  $2.59_{c}$  $2.97_{a}$ 3.18  $3.13_{\rm a}$ Community (0.88)(0.77)(0.96)(0.95)(0.87)Behavior: Outness  $3.64_{b}$ 5.18  $5.52_{a}$  $5.31_{a}$  $4.48_{\rm c}$ (2.79)(2.74)(2.88)(2.90)(2.84)6. CES-D 15.86 16.21<sub>a</sub>  $14.60_{\rm b}$  $19.34_{c}$ 17.56<sub>ac</sub> (10.30)(9.32)(11.78)(10.69)(10.13)State Anxiety  $7.20_{a}$  $7.27_{ab}$  $7.70_{ab}$  $8.05_{\rm b}$ 7.34 (3.94)(3.56)(3.53)(3.80)(3.61)Positive Affect  $9.04_{a}$ 9.09  $9.24_{a}$  $8.61_{a}$  $9.01_{a}$ (3.04)(3.08)(3.01)(3.32)(3.07)

Table reports mean scores and, in parentheses, standard deviations. Across each row, means with different subscripts differ significantly at p < .01, based on Bonferroni-corrected pairwise comparisons using analyses of covariance.

 $15.37_{b}$ 

(2.81)

 $13.73_{c}$ 

(3.77)

 $14.67_{ac}$ 

(3.34)

14.97

(3.08)

14.83<sub>a</sub>

(3.06)

Self-Esteem

Table 3
Self-Stigma (Baseline IHP-R) Scores By Political and Religious Variables

| Variable              | Subgroup                      | % of Sample | IHP-R                    |
|-----------------------|-------------------------------|-------------|--------------------------|
| Political Party       | Republican                    | 10%         | 1.81 (0.92) <sub>a</sub> |
|                       | Democrat                      | 67%         | $1.37(0.63)_{b}$         |
|                       | Independent/Other             | 23%         | 1.53 (0.77) <sub>b</sub> |
| Political Ideology    | Conservative                  | 12%         | 1.80 (0.97) <sub>a</sub> |
| 1 01111041 1410010 87 | Middle of Road                | 18%         | 1.57 (0.76) <sub>b</sub> |
|                       | Liberal                       | 70%         | 1.36 (0.63) <sub>c</sub> |
| Religious Beliefs     | Formal Religious Affiliation  | 19%         | 1.64 (0.86) <sub>a</sub> |
| Rengious Benefit      | Belief in God, No Affiliation | 34%         | $1.51 (0.75)_a$          |
|                       | Spiritual, No Belief in God   | 25%         | $1.32 (0.56)_{\rm b}$    |
|                       | Agnostic/Atheist/Other        | 22%         | 1.35 (0.61) <sub>b</sub> |
| Religious Attendance  | Never                         | 48%         | 1.39 (0.66) <sub>a</sub> |
| (previous year)       | Less than Weekly              | 41%         | 1.51 (0.76) <sub>b</sub> |
| G J J                 | Weekly or More                | 10%         | 1.55 (0.79) <sub>b</sub> |

*Note*. Final column reports mean raw IHP-R scores and, in parentheses, standard deviations. Within each variable, IHP-R mean scores with different subscripts differ significantly (p < .005 for religious beliefs, p < .01 for all other variables), based on Bonferroni-corrected pairwise comparisons of levels of the independent variable using analysis of covariance. Variations in the number of cases across variables reflect missing data. For political party, n = 2,185. For political ideology, n = 2,181. For religious beliefs, n = 2,186. For religious attendance, n = 2,203. Some percentages do not total 100 because of rounding.

Table 4: Regression Analysis: Beliefs, Affect, and Behavior As Predictors of Self-Stigma

|  | Independent<br>Variable | B<br>(Unstandardized) | SE   | Beta<br>(Standardized) | t                  |
|--|-------------------------|-----------------------|------|------------------------|--------------------|
| 1. Beliefs: Costs & Benefits <sup>a</sup>                |                         |                       |      |                        |                    |
|  | Beliefs: Benefits       | 168                   | .017 | 258                    | -10.07***          |
|  | Beliefs: Costs          | .161                  | .018 | .232                   | 9.03***            |
|  | Sex                     | 121                   | .018 | 161                    | -6.56***           |
|  | Sexual orientation      | 174                   | .025 | 173                    | <b>-</b> 7.05***   |
|  | Age                     | 001                   | .001 | 020                    | -0.76              |
|  | Education level         | 001                   | .004 | 010                    | -0.38              |
|  | Race                    | .069                  | .046 | .037                   | 1.50               |
| 2. Affect Toward<br>Community<br>Membership <sup>b</sup> |                         |                       |      |                        |                    |
| 1  | Affect                  | 174                   | .009 | 385                    | -20.11***          |
|  | Sex                     | 143                   | .015 | 181                    | -9.61***           |
|  | Sexual orientation      | 151                   | .020 | 143                    | <b>-</b> 7.52 ***  |
|  | Age                     | 002                   | .001 | 065                    | -3.26***           |
|  | Education level         | 007                   | .003 | 044                    | -2.24**            |
|  | Race                    | .157                  | .037 | .080                   | 4.30***            |
| 3. Behavior: Outness <sup>c</sup>                        |                         |                       |      |                        |                    |
|  | Outness To World        | 032                   | .003 | 230                    | -10.82***          |
|  | Mother knows            | 006                   | .023 | 007                    | -0.28              |
|  | Father knows            | 040                   | .019 | 050                    | -2.15*             |
|  | Sex                     | 184                   | .016 | 235                    | -11.88***          |
|  | Sexual orientation      | 167                   | .022 | 157                    | -7.58***           |
|  | Age                     | 003                   | .001 | 073                    | -3.46***           |
|  | Education level         | 008                   | .003 | 054                    | -2.59**<br>2.60*** |
|  | Race                    | .139                  | .039 | .071                   | 3.60***            |

(Table continues)

| T-1-1- 1 | (continued)   |
|----------|---------------|
| Table 4  | rcontiniiea i |
|          |               |

| rable + (continued)   |                    |                  |      |                |                      |
|-----------------------|--------------------|------------------|------|----------------|----------------------|
|                       | Independent        | В                | SE   | Beta           | t                    |
|                       | Variable           | (Unstandardized) |      | (Standardized) |                      |
| 4. Belief, Affect, &  |                    |                  |      |                |                      |
| Behavior <sup>d</sup> |                    |                  |      |                |                      |
|                       | Beliefs: Benefits  | 070              | .017 | 108            | -4.19 <sup>***</sup> |
|                       | Beliefs: Costs     | .114             | .017 | .166           | -6.83***             |
|                       | Beliefs: Choice    | 007              | .020 | 008            | -0.33                |
|                       | Affect             | 143              | .011 | 340            | -13.47***            |
|                       | Outness to world   | 021              | .003 | 166            | -6.65***             |
|                       | Father knows       | 035              | .020 | 046            | -1.74                |
|                       | Mother knows       | .029             | .024 | .031           | 1.18                 |
|                       | Sex                | 088              | .018 | 118            | -4.96***             |
|                       | Sexual orientation | 101              | .025 | 100            | -4.96***             |
|                       | Age                | 001              | .001 | 037            | -1.50                |
|                       | Education level    | 001              | .003 | 006            | -0.26                |
|                       | Race               | .053             | .042 | .029           | 1.26                 |

*Note.* Table reports coefficients for regression analysis with all variables included in the equation. For all analyses, dependent variable = baseline IHP-R scores. For Sex, 1=female. For sexual orientation, 1 = gay/lesbian, 0 = bisexual. For race, 1=Black, 0 = other. Education level was coded as an 11-point ordinal variable, ranging from *less than high school* to *doctoral degree*. Age was coded in years.

<sup>&</sup>lt;sup>a</sup> For Step 1 (control variables),  $R^2 = 7.0\%$  (F (5, 1448) = 21.92, p < .001). For Step 2 (beliefs added), change in  $R^2 = 8.2\%$  (F (2, 1446) = 69.85, p < .001). n = 1,454.

<sup>&</sup>lt;sup>b</sup> For Step 1 (control variables),  $R^2 = 13.5\%$  (F (5, 2136) = 66.83, p < .001). For Step 2 (affect added), change in  $R^2 = 13.8\%$  (F (1, 2135) = 404.48, p < .001). n = 2,124.

<sup>&</sup>lt;sup>c</sup> For Step 1 (control variables),  $R^2 = 13.0\%$  (F (5, 2106) = 63.08, p < .001). For Step 2 (outness added), change in  $R^2 = 6.0\%$  (F (3, 2103) = 51.55, p < .001). n = 2.112.

<sup>&</sup>lt;sup>d</sup> For Step 1 (control variables),  $R^2 = 7.3\%$  (F (5, 1384) = 21.87, p < .001). For Step 2 (all belief, affect, and outness variables added), change in  $R^2 = 22.5\%$  (F (7, 1377) = 63.05, p < .001). n = 1,390.

<sup>\*</sup> p < .05. \*\* p < .01. \*\*\* p < .001.

Table 5
Self-Stigma (Baseline IHP-R Scores) By Essentialist Beliefs and Outness To Parents

|                         | Group       |             |             |             | Total       |
|-------------------------|-------------|-------------|-------------|-------------|-------------|
| Variable                | Gay Men     | Lesbians    | Bisexual    | Bisexual    |             |
|                         |             |             | Men         | Women       |             |
| 1. Essentialist Beliefs |             |             |             |             |             |
| None/A Little           | 1.53 (0.77) | 1.26 (0.52) | 2.07 (0.95) | 1.46 (0.69) | 1.45 (0.72) |
|                         | [87%]       | [70%]       | [59%]       | [45%]       | [74%]       |
| Some/Fair Amount/       | 1.54 (0.74) | 1.21 (0.40) | 2.32 (0.99) | 1.59 (0.82  | 1.48 (0.75) |
| A Lot                   | [13%]       | [30%]       | [41%]       | [55%])      | [26%]       |
| 2. Outness To Mother    |             |             |             |             |             |
| Not Out                 | 1.72 (0.84) | 1.36 (0.62) | 2.17 (0.92) | 1.58 (0.78) | 1.65 (0.83) |
|                         | [17%]       | [16%]       | [43%]       | [40%]       | [21%]       |
| Out, No Discussion      | 1.57 (0.77) | 1.30 (0.56) | 2.57 (1.08) | 1.66 (0.92) | 1.56 (0.82) |
|                         | [15%]       | [14%]       | [17%]       | [12%]       | [15%]       |
| Discussion              | 1.47 (0.73) | 1.21 (0.44) | 1.99 (0.96) | 1.44 (0.68) | 1.37 (0.65) |
|                         | [68%]       | [70%]       | [40%]       | [48%]       | [65%]       |
| 3. Outness To Father    |             |             |             |             |             |
| Not Out                 | 1.71 (0.83) | 1.30 (0.56) | 2.17 (0.98) | 1.58 (0.81) | 1.61 (0.82) |
|                         | [34%]       | [32%]       | [66%]       | [56%]       | [38%]       |
| Out, No Discussion      | 1.49 (0.76) | 1.24 (0.47) | 2.50 (1.05) | 1.61 (0.78) | 1.43 (0.71) |
|                         | [23%]       | [26%]       | [15%]       | [17%]       | [23%]       |
| Discussion              | 1.41 (0.67) | 1.22 (0.46) | 1.83 (0.83) | 1.40 (0.67) | 1.34 (0.60) |
|                         | [44%]       | [42%]       | [19%]       | [27%]       | [39%]       |

Table reports mean raw IHP-R scores, standard deviations (in parentheses), and proportion of individuals from each sexual orientation and gender group within the cell [in brackets]. Within sexual orientation and gender groups, some percentages do not total 100 because of rounding. Variations in the number of cases across variables reflect missing data. For essentialist beliefs, n = 2,218. For outness to mother, n = 2,240. For outness to father, n = 2,210.

Table 6: Regression Analyses: Self-Stigma as a Predictor of Variables Related To Psychological Well-Being and Distress

| The late of the  |    | Dependent<br>Variable | Independent<br>Variables | B<br>(Unstandardized) | SE    | Beta<br>(Standardized) | t                     |
|--|----|-----------------------|--------------------------|-----------------------|-------|------------------------|-----------------------|
| Self-Stigma   -2.135   .181  271   -11.79***   Sex   .080   .139   .013   0.58     Sexual   .351   .188   .042   1.87     orientation   Race   .680   .346   .043   1.97*     Education   .130   .028   .108   4.71***     level   Age   .005   .007   .017   0.73     Victimization  603   .313  042   -1.93*      2. Depressive   Symptoms <sup>2</sup>   Self-Stigma   6.823   .592   .265   11.52***     Sex   .272   .455   .013   0.60     Sexual   -1.123   .611  041   -1.84     orientation   Race  122   1.105  002   -0.11     Education  342   .091  087   -3.77***     level   Age  094   .022  098   -4.22***     Age  094   .022  098   -4.22***     Victimization   4.386   1.054   .090   4.16***      3. State   Anxiety <sup>3</sup>   Self-Stigma   1.483   .217   .161   6.82***     Sex   .559   .167   .077   3.35***     Sex   .540   .224   .025   -1.09     orientation   Race   .623   .406   .034   -1.54     Education   .013   .033   .009   .0.39     level   Age  033   .008  095   .400****  | 1. |                       |                          |                       |       |                        |                       |
| Sex   Sexual   Sexu |    |                       | Self-Stigma              | -2.135                | .181  | 271                    | -11.79 <sup>***</sup> |
| orientation Race   |    |                       |                          | .080                  | .139  | .013                   | 0.58                  |
| Race Education 1.130 .028 .108 4.71***  Education 1.130 .028 .108 4.71***  Age .005 .007 .017 0.73  Victimization603 .313042 -1.93*  2. Depressive Symptoms <sup>2</sup> Self-Stigma 6.823 .592 .265 11.52***  Sex .272 .455 .013 0.60  Sexual -1.123 .611041 -1.84  orientation  Race122 1.105002 -0.11  Education342 .091087 -3.77***  level  Age .094 .022098 -4.22***  Age .094 .022098 -4.22***  Victimization 4.386 1.054 .090 4.16***  3. State  Anxiety <sup>3</sup> Self-Stigma 1.483 .217 .161 6.82***  Sex .559 .167 .077 3.35***  Sexual244 .224025 -1.09  orientation  Race .623 .406034 -1.54  Education013 .033009 -0.39  level  Age .033 .008095 -4.00***  |    |                       | Sexual                   | .351                  | .188  | .042                   | 1.87                  |
| Education level Age  |    |                       | orientation              |                       |       |                        |                       |
| Level Age  |    |                       | Race                     | .680                  |       | .043                   | 1.97*                 |
| Age Victimization603   |    |                       |                          | .130                  | .028  | .108                   | 4.71***               |
| Victimization  603   .313  042   -1.93*  |    |                       |                          |                       |       |                        |                       |
| 2. Depressive Symptoms <sup>2</sup> Self-Stigma 6.823 .592 .265 11.52*** Sex .272 .455 .013 0.60 Sexual -1.123 .611041 -1.84 orientation Race122 1.105002 -0.11 Education342 .091087 -3.77*** level Age094 .022098 -4.22*** Victimization 4.386 1.054 .090 4.16***  3. State Anxiety <sup>3</sup> Self-Stigma 1.483 .217 .161 6.82*** Sex .559 .167 .077 3.35*** Sexual244 .224025 -1.09 orientation Race623 .406034 -1.54 Education013 .033009 -0.39 level Age033 .008095 -4.00***  |    |                       |                          |                       |       |                        |                       |
| Symptoms <sup>2</sup> Self-Stigma Sex  Sex  .272  .455  .013  .600 Sexual  .1.123  .611  .041  .1.84  orientation  Race  .122  .1.105  .092  .091  .087  .3.77***  level  Age  .094  .022  .098  -4.22***  Victimization  4.386  1.054  .090  3. State  Anxiety <sup>3</sup> Self-Stigma  .1.483  .217  .161  .82***  Sex  .559  .167  .077  .3.35***  Sexual  .244  .224  .025  .1.09  orientation  Race  .244  .224  .025  .1.09  orientation  Race  .623  .406  .034  .1.54  Education  .013  .033  .009  .039  level  Age  .033  .008  .095  .400****  |    |                       | Victimization            | 603                   | .313  | 042                    | -1.93                 |
| Self-Stigma 6.823 .592 .265 11.52*** Sex .272 .455 .013 0.60 Sexual -1.123 .611041 -1.84 orientation Race122 1.105002 -0.11 Education342 .091087 -3.77*** level Age094 .022098 -4.22*** Victimization 4.386 1.054 .090 4.16***  Self-Stigma 1.483 .217 .161 6.82*** Sex .559 .167 .077 3.35*** Sexual244 .224025 -1.09 orientation Race623 .406034 -1.54 Education013 .033009 -0.39 level Age033 .0080954.00***  | 2. |                       |                          |                       |       |                        |                       |
| Sexual orientation Race122 1.105002 -0.11 Education342 .091087 -3.77*** level Age094 .022098 -4.22*** Victimization 4.386 1.054 .090 4.16**  Self-Stigma 1.483 .217 .161 6.82*** Sex .559 .167 .077 3.35** Sexual244 .224025 -1.09 orientation Race623 .406034 -1.54 Education013 .033009 -0.39 level Age033 .008095400***   |    |                       | Self-Stigma              | 6.823                 | .592  | .265                   | 11.52***              |
| orientation Race122 1.105002 -0.11 Education342 .091087 -3.77*** level Age094 .022098 -4.22*** Victimization 4.386 1.054 .090 4.16***  Self-Stigma 1.483 .217 .161 6.82*** Sex .559 .167 .077 3.35*** Sexual244 .224025 -1.09 orientation Race623 .406034 -1.54 Education013 .033009 -0.39 level Age033 .008095 -4.00***   |    |                       | Sex                      | .272                  | .455  | .013                   |                       |
| Education level Age  |    |                       |                          | -1.123                | .611  | 041                    | -1.84                 |
| level Age  |    |                       | Race                     | 122                   | 1.105 | 002                    |                       |
| Age  |    |                       |                          | 342                   | .091  | 087                    | -3.77***              |
| Victimization       4.386       1.054       .090       4.16***         3. State Anxiety³       Self-Stigma       1.483       .217       .161       6.82***         Sex       .559       .167       .077       3.35***         Sexual      244       .224      025       -1.09         orientation       Race      623       .406      034       -1.54         Education      013       .033      009       -0.39         level       Age      033       008      095       -4.00****   |    |                       |                          | 094                   | .022  | 098                    | -4.22***              |
| Anxiety <sup>3</sup> Self-Stigma 1.483 .217 .161 6.82***  Sex .559 .167 .077 3.35***  Sexual244 .224025 -1.09  orientation  Race623 .406034 -1.54  Education013 .033009 -0.39  level  Age -033 008 -095 -400***  |    |                       | _                        | 4.386                 | 1.054 | .090                   | 4.16***               |
| Sex .559 .167 .077 3.35  Sexual244 .224025 -1.09  orientation  Race623 .406034 -1.54  Education013 .033009 -0.39  level  Age -033 008 -095 -400***   | 3. |                       |                          |                       |       |                        |                       |
| Sex .559 .167 .077 3.35  Sexual244 .224025 -1.09  orientation  Race623 .406034 -1.54  Education013 .033009 -0.39  level  Age -033 008 -095 -400***   |    | ,                     | Self-Stigma              | 1.483                 | .217  | .161                   | 6.82***               |
| Sexual244 .224025 -1.09 orientation  Race623 .406034 -1.54  Education013 .033009 -0.39  level  Age033 .008095 -4.00***   |    |                       |                          | .559                  | .167  | .077                   | 3.35***               |
| Race623 .406034 -1.54 Education013 .033009 -0.39 level Age033 .008095 -4.00***   |    |                       | Sexual                   | 244                   | .224  | 025                    | -1.09                 |
| Education013 .033009 -0.39 level Age -033 008 -095 -400***   |    |                       |                          |                       |       |                        |                       |
| level<br>Age - 033 008 - 095 -4 00***  |    |                       |                          |                       |       |                        |                       |
| Age      033       .008      095       -4.00***         Victimization       1.297       .379       .076       3.42***  |    |                       |                          | 013                   | .033  | 009                    |                       |
| Victimization 1.297 .379 .076 3.42***  |    |                       | Age                      | 033                   | .008  | 095                    | -4.00***              |
|  |    |                       |                          |                       |       |                        | 3.42***               |

Table 6 (continued)

|    | Dependent<br>Variable           | Independent<br>Variables | B (Unstandardized) | SE           | Beta (Standardized) | t                            |
|----|---------------------------------|--------------------------|--------------------|--------------|---------------------|------------------------------|
| 4. | Positive<br>Affect <sup>4</sup> |                          |                    |              |                     |                              |
|    |                                 | Self-Stigma              | 724                | .188         | 093                 | -3.86***                     |
|    |                                 | Sex                      | .091               | .144         | .015                | 0.63                         |
|    |                                 | Sexual orientation       | .207               | .194         | .025                | 1.07                         |
|    |                                 | Race                     | .577               | .351         | .037                | 1.65                         |
|    |                                 | Education level          | .039               | .029         | .033                | 1.37                         |
|    |                                 | Age<br>Victimization     | 020<br>073         | .007<br>.330 | 068<br>005          | -2.80 <sup>**</sup><br>-0.22 |
|    |                                 | v ictimization           | .075               | .550         | .005                | 0.22                         |

*Note.* Table reports coefficients for regression analyses with all variables included in the equation. Self-Stigma = Baseline IHP-R Scores (higher scores = more self-stigma). For Sex, 1=female. For sexual orientation, 1 = gay/lesbian, 0 = bisexual. For race, 1=Black, 0 = other. Education level was coded as an 11-point ordinal variable, ranging from *less than high school* to *doctoral degree*. Age was coded in years. For victimization, 1 = respondent experienced violent victimization based on sexual orientation during previous 5 years, 0 = all others.

<sup>&</sup>lt;sup>a</sup> For Step 1 (control variables),  $R^2 = 4.1\%$  (F (6, 1937) = 13.71, p < .001). For Step 2 (IHP-R added), change in  $R^2 = 6.4\%$  (F (1, 1936) = 139.10, p < .001). n = 1,944.

<sup>&</sup>lt;sup>b</sup> For Step 1 (control variables),  $R^2 = 5.6\%$  (F (6, 1894) = 18.83, p < .001). For Step 2 (IHP-R added), change in  $R^2 = 6.2\%$  (F (1, 1893) = 132.69, p < .001). n = 1,901.

<sup>&</sup>lt;sup>c</sup> For Step 1 (control variables),  $R^2 = 2.4\%$  (F (6, 1954) = 7.88, p < .001). For Step 2 (IHP-R added), change in  $R^2 = 2.3\%$  (F (1, 1953) = 46.55, p < .001). n = 1,961.

<sup>&</sup>lt;sup>d</sup> For Step 1 (control variables),  $R^2 = 0.8\%$  (F (6, 1936) = 2.48, p < .05). For Step 2 (IHP-R added), change in  $R^2 = 0.8\%$  (F (1, 1935) = 14.86, p < .001). n = 1,943.

<sup>\*</sup> *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001

Table 7: Mediation Analysis Results (Baseline Data)

| Outcome Variable   | Path/effect  | В  | SE                              | 95% CI       |
|--|--|--|---------------------------------|--------------|
| Depression   |  |  |                                 |              |
|  | c  | 6.73 ***   | .60                             |              |
| $R^2 = .46$  | a (IHP-R $\rightarrow$ ESTEEM)   | -2 21 ***  | .19                             |              |
| $F(8, 1850) = 193.67^{***}$                              | b (Esteem $\rightarrow$ DEP)   | -2.00 ***  | .06                             |              |
|  | $c'$ (IHP-R $\rightarrow$ DEP)   | 2.31 ***   | .49                             |              |
|  | a X b  | 4.42 ***   | .46                             | 3.59, 5.35   |
| Anxiety  | c  | 1.51***  | .22                             |              |
| $R^2 = .31$  | a (IHP-R → ESTEEM)   | -2.11 ***  | .18                             |              |
| $F(8, 1903) = 107.32^{***}$                              | b (ESTEEM $\rightarrow$ ANX)   | -0.63 ***  | .02                             |              |
| 1 (0, 1903) 107.32                                       | $c'$ (IHP-R $\rightarrow$ ANX)   | 0.17   | .19                             |              |
|  | a X b  | 1.34   | .13                             | 1.12, 1.63   |
| Positive Affect $R^{2} = .29$ $F(8, 1889) = 94.72^{***}$ | c a (IHP-R $\rightarrow$ ESTEEM) b (ESTEEM $\rightarrow$ PA) c' (IHP-R $\rightarrow$ PA) a X b | -0.73 ***<br>-2.18 ***<br>0.54 ***<br>0.46 **<br>-1.19 | .19<br>.18<br>.02<br>.17<br>.12 | -1.46, -0.95 |

*Note*. In each analysis, sexual orientation, sex, race, educational level, age were entered as control variables.

IHP-R = Baseline self-stigma. ESTEEM = Baseline Self-esteem. ANX = Baseline State Anxiety. PA = Baseline Positive Affect.

For paths, c = Total effect of IV on DV. a = Independent variable (IV) to mediators. b = Direct effect of mediator on dependent variable (DV). c' = Direct effect of IV on DV.  $a \times b = Indirect$  effect of IV on DV through mediator.

<sup>\*\*</sup> *p* < .01. \*\*\* *p* < .001

Table 8: Mediation Analysis Results (Longitudinal Data)

| Outcome Variable & Model Summary   | Path/effect  | В  | SE                              | 95% CI       |
|--|--|--|---------------------------------|--------------|
| Depression (T <sub>2</sub> ) $R^{2} = .37$ $F(4, 1184) = 172.04^{***}$     | c a (T <sub>1</sub> IHP-R $\rightarrow$ T <sub>1</sub> ESTEEM) b (T <sub>1</sub> ESTEEM $\rightarrow$ T <sub>2</sub> DEP) c' (T <sub>1</sub> IHP-R $\rightarrow$ T <sub>2</sub> DEP)       | 1.22* -0.62*** -0.33*** 1.02                         | .60<br>.19<br>.06<br>.49        | 0.05.0.45    |
|  | a X b  | 0.20   | .10                             | 0.05, 0.45   |
| Anxiety (T <sub>2</sub> ) $R^{2} = .31$ $F(4, 1224) = 132.23^{***}$        | c a (T <sub>1</sub> IHP-R $\rightarrow$ T <sub>1</sub> ESTEEM) b (T <sub>1</sub> ESTEEM $\rightarrow$ T <sub>2</sub> ANX) c' (T <sub>1</sub> IHP-R $\rightarrow$ T <sub>2</sub> ANX) a X b | 0.43 <sup>†</sup> -1.02 *** -0.13 *** 0.30 0.14      | .24<br>.20<br>.03<br>.24<br>.05 | 0.06, 0.26   |
| Positive Affect (T <sub>2</sub> ) $R^{2} = .24$ $F(4, 1222) = 97.65^{***}$ | c a (T <sub>1</sub> IHP-R $\rightarrow$ T <sub>1</sub> ESTEEM) b (T <sub>1</sub> ESTEEM $\rightarrow$ T <sub>2</sub> PA) c' (T <sub>1</sub> IHP-R $\rightarrow$ T <sub>2</sub> PA) a X b   | -0.62 **<br>-1.16 ***<br>0.14 ***<br>0.45 *<br>-0.17 | .21<br>.20<br>.03<br>.21        | -0.29, -0.09 |

*Note*. In each analysis, the baseline measure of the outcome variable was entered as a control variable, along with a dichotomous variable indicating whether the respondent had experienced a hate crime victimization since completing the baseline questionnaire (1 = Yes, 0 = No).

 $T_1$  IHP-R = Self-stigma (Baseline).  $T_1$  ESTEEM = Self-esteem (Baseline).  $T_2$  DEP = Depressive symptoms (Follow-up).  $T_2$  ANX = State Anxiety (Follow-up).  $T_2$  PA = Positive Affect (Follow-up).

For paths, c = Total effect of IV on DV. a = Independent variable (IV) to mediators. b = Direct effect of mediator on dependent variable (DV). c' = Direct effect of IV on DV. a X b = Indirect effect of IV on DV through mediator.

\* 
$$p < .05$$
. \*\*  $p < .01$ . \*\*\*  $p < .001$  †  $p < .10$ 

### SUPPLEMENTAL APPENDIX

### Results of Analysis of Covariance

| Model                | Effect                               | df      | F         | $\eta^2$ |
|----------------------|--------------------------------------|---------|-----------|----------|
| Essentialist Beliefs |                                      |         |           |          |
|                      | Beliefs                              | 1, 2113 | 2.36      | .001     |
|                      | Sex                                  | 1, 2113 | 129.91*** | .058     |
|                      | Sexual Orientation                   | 1, 2113 | 108.15*** | .049     |
|                      | Beliefs X Sex                        | 1, 2113 | 0.40      | .000     |
|                      | Beliefs X Sexual Orientation         | 1, 2113 | 5.02*     | .002     |
|                      | Sex X Sexual Orientation             | 1, 2113 | 18.04***  | .008     |
|                      | Beliefs X Sex X Sexual Orientation   | 1, 2113 | 0.03      | .000     |
| Outness To Mother    |                                      |         |           |          |
|                      | Outness To Mother                    | 1, 2135 | 9.75**    | .005     |
|                      | Sex                                  | 1, 2135 | 127.56*** | .056     |
|                      | Sexual Orientation                   | 1, 2135 | 68.43***  | .031     |
|                      | Outness X Sex                        | 1, 2135 | 0.13      | .000     |
|                      | Outness X Sexual Orientation         | 1, 2135 | 3.05      | .001     |
|                      | Sex X Sexual Orientation             | 1, 2135 | 13.72***  | .006     |
|                      | Outness X Sex X Sexual Orientation   | 1, 2135 | 0.61      | .000     |
| Discussed With       |                                      |         |           |          |
|                      | Discussed With Mother                | 1, 1697 | 17.94***  | .010     |
|                      | Sex                                  | 1, 1697 | 74.17***  | .042     |
|                      | Sexual Orientation                   | 1, 1697 | 66.64***  | .038     |
|                      | Discussed X Sex                      | 1, 1697 | 2.85      | .002     |
|                      | Discussed X Sexual Orientation       | 1, 1697 | 4.32*     | .003     |
|                      | Sex X Sexual Orientation             | 1, 1697 | 13.46***  | .008     |
|                      | Discussed X Sex X Sexual Orientation | 1, 1697 | 1.99      | .001     |

<sup>&</sup>lt;sup>a</sup>Analysis restricted to respondents who reported the parent knew about their sexual orientation.

p < .05. p < .01. p < .001.

### APPENDIX (continued)

| Model               | Effect                         | df      | F         | $\eta^2$ |
|---------------------|--------------------------------|---------|-----------|----------|
| Outness To Father   |                                |         |           |          |
|                     | Outness To Father              | 1, 2107 | 9.33**    | .004     |
|                     | Sex                            | 1, 2107 | 125.78*** | .056     |
|                     | Sexual Orientation             | 1, 2107 | 83.44***  | .038     |
|                     | Outness X Sex                  | 1, 2107 | 1.56      | .001     |
|                     | Outness X Sexual Orientation   | 1, 2107 | 2.61      | .001     |
|                     | Sex X Sexual Orientation       | 1, 2107 | 11.55***  | .005     |
|                     | Outness X Sex X Sexual         | 1, 2107 | 1.73      | .001     |
|                     | Orientation                    |         |           |          |
| Discussed With      |                                |         |           |          |
| Father <sup>a</sup> |                                |         |           |          |
|                     | Discussed With Father          | 1, 1316 | 18.70***  | .014     |
|                     | Sex                            | 1, 1316 | 51.52***  | .038     |
|                     | Sexual Orientation             | 1, 1316 | 62.95***  | .046     |
|                     | Discussed X Sex                | 1, 1316 | 2.46      | .002     |
|                     | Discussed X Sexual Orientation | 1, 1316 | 10.31***  | .008     |
|                     | Sex X Sexual Orientation       | 1, 1316 | 11.48***  | .009     |
|                     | Discussed X Sex X Sexual       | 1, 1316 | 1.36      | .001     |
|                     | Orientation                    |         |           |          |

<sup>&</sup>lt;sup>a</sup>Analysis restricted to respondents who reported the parent knew about their sexual orientation.

p < .05. p < .01. p < .001.